SURVEYING, AERIAL PHOTOGRAPHY AND PHOTOGRAMMETRIC MAPPING SERVICES ECC SITE

REQUEST FOR PROPOSAL W65230.C2

OBJECTIVE

The objective of the services outlined in this Request for Proposal (RFP) is to develop information about the Environmental Chemical and Conservation Corp. (ECC) site that will aid in the development of monitoring programs and in assessing the impact of the site on its surroundings. Specific goals of the study are:

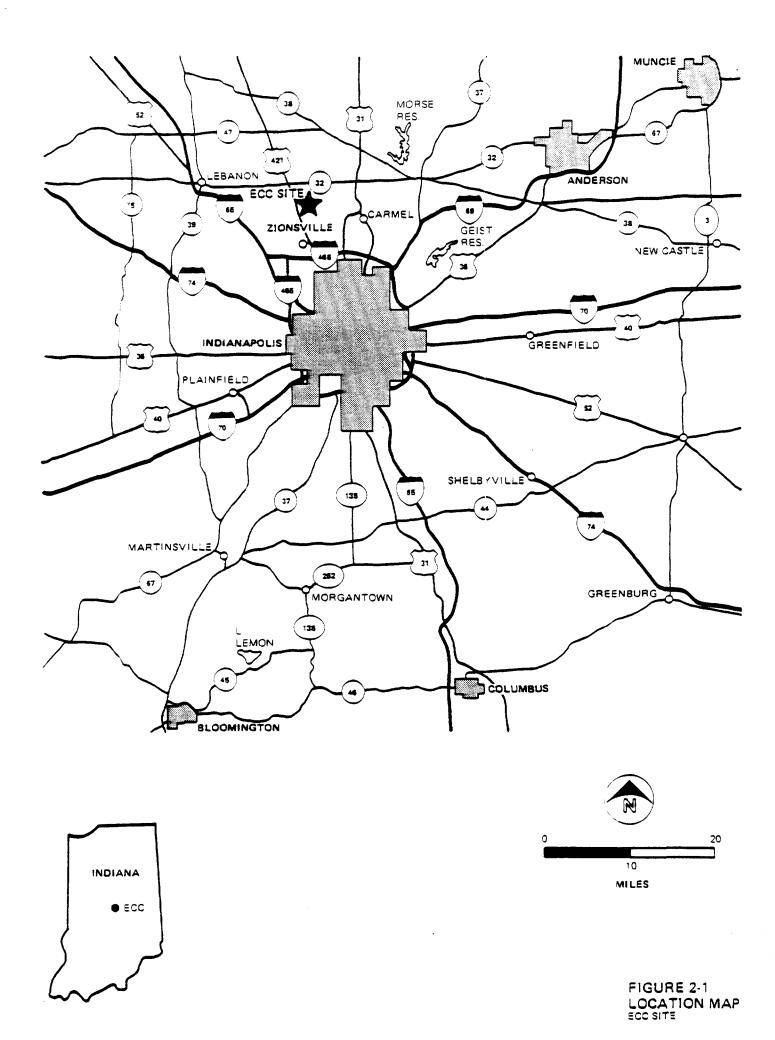
- o To provide the surveying required for control of the photogrammetric mapping as outlined in Appendix A.
- o To provide the required retracement of the property boundary outlined in Appendix A.
- o To provide black and white photography for photogrammetric mapping of the site as outlined in Appendix B.
- o To provide a single shot exposure of the site as outlined in Appendix B.
- o To provide photographic maps of the site as outlined in Appendix C.

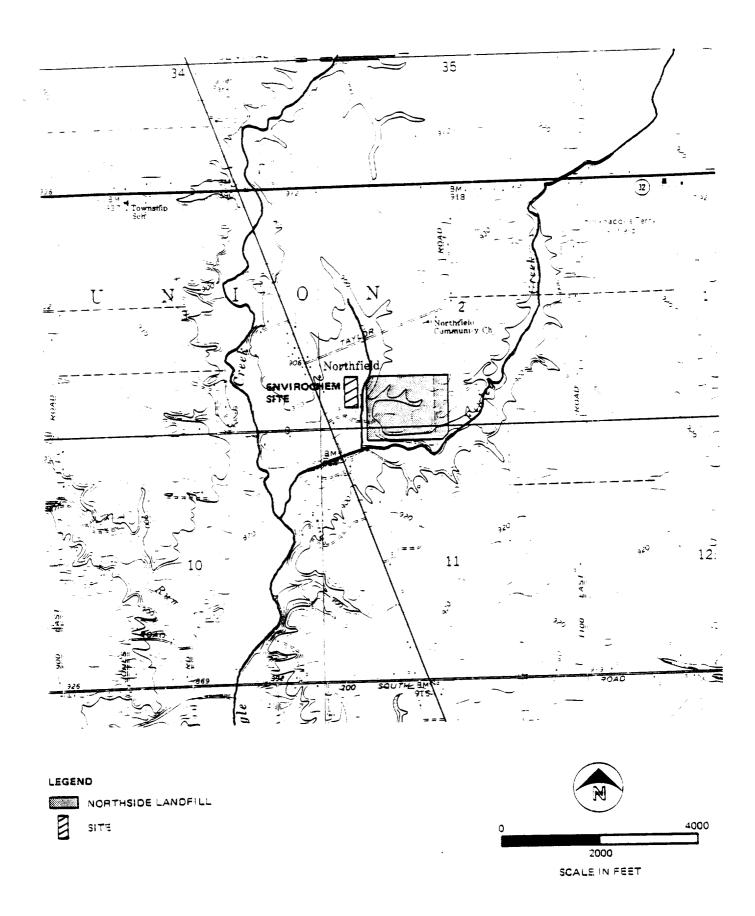
BACKGROUND

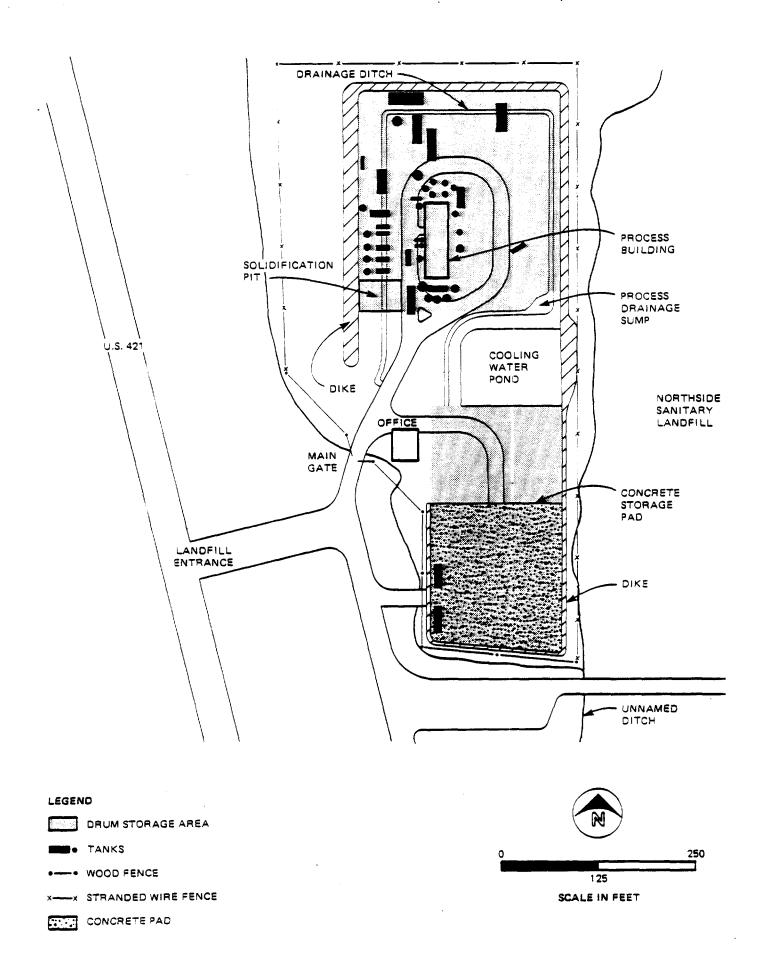
Environmental Conservation and Chemical Corporation is in Boone County, 865 south U.S. 421, Zionsville, Indiana, about 10 miles northwest of Indianapolis (Figure 2-1). The site occupies 6.5 acres within the 168 acre Northside Sanitary Landfill, an ongoing solid waste disposal facility permitted by the Indiana Stream Pollution Control Board (SPCB) (Figure 2-2).

The ECC facility is bounded on the south and east by the landfill. A site map is shown in Figure 2-3. An unnamed ditch separates the two facilities along the east boundary. The site is bounded on the north and west sides by several residential homes, located within one-half mile of the facility.

On the site are about 25,000 drums, 47 bulk storage tanks, a cooling water pond, process building and main office. Some of the drums are bulging, leaking, or otherwise damaged. They are stacked three and four high on a concrete pad (south storage area) and on the ground (north storage area). An earthen dike surrounds the immediate processing and storage area. A combination wood and stranded wire fence surrounds the entire site.







Union Township, the location of the ECC site, is included in the Tipton Till Plain physiographic unit as defined by Malott (1922). The Tipton Till Plain is an extensive flat to gently rolling area formed on glacial drift deposited during the Wisconsin glacial advance.

The glacial drift deposited in the area surrounding the site consists of Wisconsin ground moraine and glacial outwash. Silt and clay with intertill sand and gravel seams comprise the ground moraine, while the outwash deposits are primarily composed of sand and gravel.

The site is bounded by an earth berm. It slopes gently toward the southeast with site elevations ranging from approximately 880 to 890 feet above mean sea level. Along the eastern boundary, the site slopes eastward toward an adjacent drainageway.

A well-developed drainage pattern exists in the area surrounding the ECC site. The principle surface drainage features are Eagle Creek and Finley Creek, an associated tributary. Two minor surface drainage features are located adjacent to the site. An unnamed ditch flows south along the eastern site boundary and converges about 1,000 feet downstream from the site with Finley Creek. The other unnamed ditch flows southwest along the western and southern site boundaries before discharging near the southeast site corner, into the unnamed tributary of Finley Creek. Finley Creek converges with Eagle Creek about one-half mile southwest of the site. Eagle Creek then flows south for about 10 miles before discharging into the Eagle Creek Reservoir. The site is located outside the 100-year flood plain.

Natural surface water runoff from the area surrounding the site flows toward the unnamed tributary of Finley Creek or toward Finley Creek. The ECC site has a bermed perimeter to prevent the escape of surface water runoff. The runoff that occurs is channeled towards the cooling water pond located along the eastern site boundary.

GENERAL REQUIREMENTS

The subcontractor selected to perform the services outlined in this RFP at the ECC site will be required to:

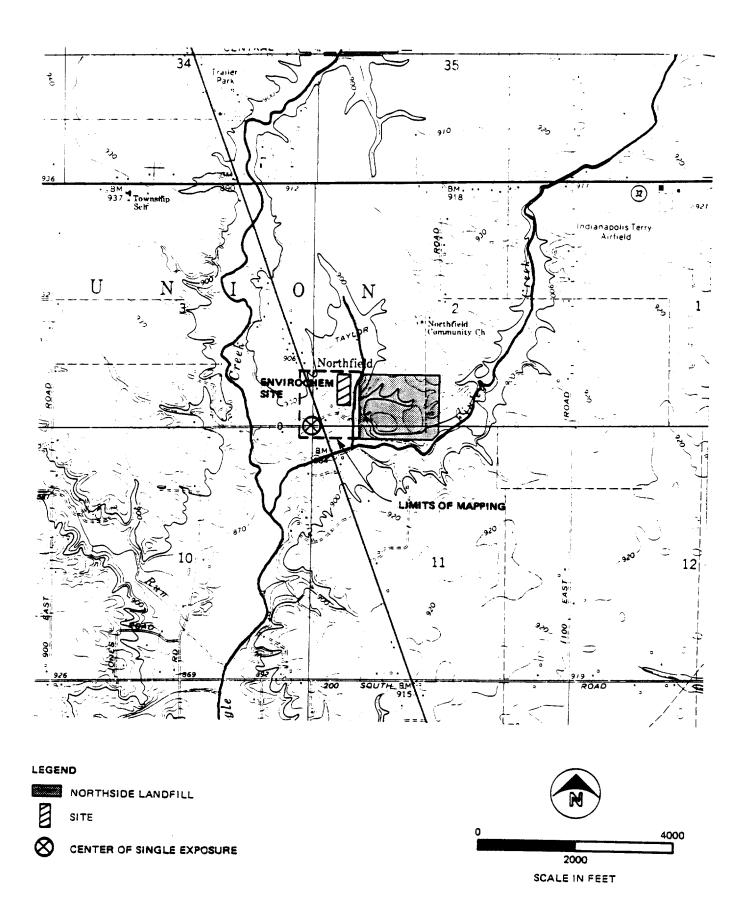
- o Review any topographic data available concerning the ECC site and its adjacent areas.
- o Submit a plan for performing the work that includes, but is not limited to: the methods to be used and the costs required to accomplish each of the goals separately, a sequence schedule, and a list of personnel assignments.

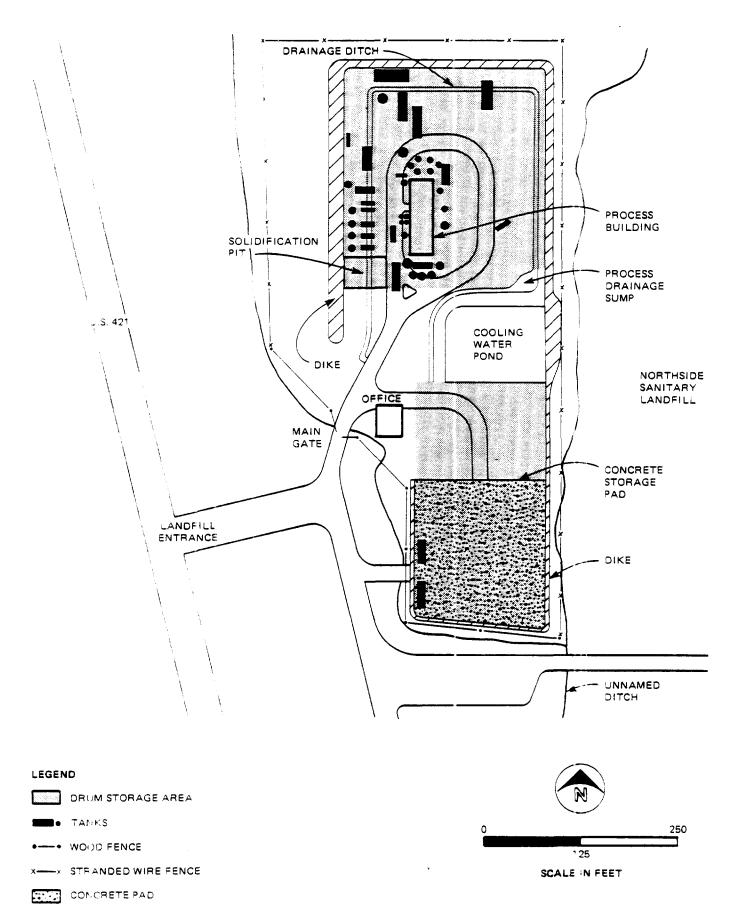
- O Upon selection and approval of the plan by CH2M HILL, perform the approved services necessary to accomplish the stated goals.
- Prepare and submit the specified deliverables.

GUIDELINES FOR PROPOSALS SUBMITTED BY SUBCONSULTANTS

In addition to the general requirements listed above, the following suggestions and guidelines are offered as an aid to the preparation of proposals by subconsultants.

- o The subconsultant will be responsible for the conduct of the study. However, the CH2M HILL project manager shall be kept advised of the progress of the work and shall be consulted before any changes are made in the plan of work.
- o The area to be studied (hereinafter called "the site") shall be that indicated on the attached portion of the U.S.G.S. quadrangle map of Zions-ville, Indiana (see Figure 1); most of the site is also shown on Figure 2, a large scale (1" = 125') map.
- o Methodologies and equipment to be used in the field should be briefly and specifically identified in the proposal; methodologies should be standard, tested methodologies. If nonstandard methodologies are to be used, they must be explained in detail and justified in the proposal.
- o The subconsultant will be responsible for securing permission to perform work on private property beyond the boundaries of the landfill. CH2M HILL, Region V of the U.S. EPA, and the Indiana State Board of Health will assist in securing permission.
- o The subconsultant will take care not to damage private property and will be responsible for any damage to private property occurring as a result of the work.
- O Cost information given in the proposal should be as detailed as possible, particularly as regards the field work.
- o The costs to accomplish each of the goals should be listed separately in the proposal.
- o The selected subconsultant will be required to sign a standard CH2M HILL purchase order (copy attached).





NOTE. No photo control work to be performed within wood and/or stranded wire fences.

SELECTION OF SUBCONSULTANT

The factors listed below are the criteria for evaluation and selection of the subconsultant:

- o Previous surveying, aerial photography and photogrammetric mapping experience.
- Availability of qualified personnel and of appropriate equipment.
- o Technical approach to meeting the identified goals of the task.
- o Time to complete the task.
- o Cost to accomplish each one of the stated goals.

DELIVERABLES

The subconsultant will have successfully completed the work described above when the subconsultant delivers, and CH2M HILL accepts as satisfactory, the deliverables required in Appendices A, B and C.

TIMETABLE

The work must be complete, and CH2M HILL must have the deliverables in hand, no later than the second week of May. Field work and preliminary interpretations should be substantially complete no later than the beginning of May.

Proposals calling for more rapid completion of the studies will be regarded favorably.

HEALTH AND SAFETY

It is anticipated that no work will be required on the site. However, if work is required on the hazardous waste site, CH2M HILL will provide the personnel and equipment to perform the required work at no cost to the subconsultant.

APPENDIX A - SURVEYING

SCOPE OF SERVICES

Provide the surveying required for control of the photogrammetric mapping and retracement of the northerly boundary of the ECC property.

SPECIFICATIONS

Field notes shall be kept in bound books provided by CH2M HILL. Each book shall have an index. Each page of field notes shall be numbered, dated and show the initials of all crew members. Graphite pencils or waterproof ballpoint pens shall be used. Erasing is not acceptable.

All surveys shall be third order plane surveys as defined in these specifications and Table 1 attached.

Third Order Plane Surveys, Horizontal - Angular measurement should be made with a 20 second transit. Angles shall be doubled and redoubled if the mean of the doubled angle differs from the first angle by more than 10 seconds.

Length measurement should be made with a calibrated tape corrected for temperature and tension. Measurements made with EDM equipment should be corrected for variation in the index of refraction.

Third Order Plane Surveys, Vertical - When practical, level runs should close on a bench mark other than the starting bench mark.

Readings should be estimated to the 0.005 foot using a calibrated rod.

Foresight and backsight distances should be balanced.

Rod levels shall be used.

Instruments shall be pegged regularly.

No side shot shall be used as a turning point in any level loop.

Temporary Monuments

Temporary monuments shall be set. They may be wood, metal, or marks scribed or otherwise marked on facilities such as sidewalks, paved streets, curbs, etc. All monuments shall be described in the field notes and referenced for future recovery.

Table 1 SPECIFICATION FOR PLANE SURVEYS

TRAVERSE	
Principal Use	Third Order
	Suburban boundary surveys, tunnel alignment, surface alignments and most construction layouts
Number of bearing courses between bearing checks not to exceed	30
Astronomical bearings: Probable error of results	6.0 sec
Bearing closure at bearing check point not to exceed (use the smaller value)	20 sec. N or 8.0 sec. per station
Standard error of the mean for length measurements	1 in 20,000
Position closure per loop in feet	1 in 10,000
LEVELING	
Levels error of closure per loop in feet	0.03 M

 ${\tt N}$ - is the number of stations for carrying bearing

M - is the distance in miles

Property Survey

Any property survey shall be performed in accordance with good land survey practices and all pertinent Federal and state laws and regulations governing land surveying.

All field note reductions shall be checked and marked in such a way that a visual inspection of the field notes will confirm checks have been made. All office entries in field notebooks shall be made in colored pencil.

The office person reducing or checking field notes shall initial each page worked on in the color used on that page.

Traverse Computations and Adjustments

Traverses will be closed and adjusted in the following manner:

- o Step One Bearing closures will be computed and adjusted if within limits.
- O Step Two Coordinate closures will be computed using adjusted bearings and unadjusted field distances.
- o Stem Three Coordinate positions will be adjusted if the traverse closes within the specified limits. The method of adjusting shall be determined by the subconsultant.
- o Final adjusted coordinates will be labelled adjusted coordinates. Field coordinates shall be specifically identified as such.
- o The direction and length of the unadjusted error of closure, the ratio of error over traverse length and the method of adjustment shall be printed with the final adjusted coordinates.

Level Circuit Computations and Adjustments

Level circuits will be closed and adjusted in the following manner:

o For single circuit, elevations will be adjusted proportionally provided the raw closure is within the prescribed limits for that circuit.

o In a level net where the elevation of a point is established by more than one circuit, the method of adjustment shall consider the length of each circuit, the closure of each circuit, and the combined effect of all the separate circuit closures on the total net adjustment.

Deliverables

Upon completion of the project all field books, computations, and pertinent reference material will be delivered to CH2M HILL.

APPENDIX B - AERIAL PHOTOGRAPHY

Scope of Services

Provide vertical black and white photography for photogrammetric mapping and a single spot exposure of the project area, the mapping area and orientation of the single spot exposure are shown on Figures 1 and 2 attached.

Specifications

The scale of the mapping photography shall be suitable for the preparation of a topographic map by photogrammetric methods at a scale of 1 inch = 50 feet with 1-foot contours. The scale of the single exposure shall be 1 inch = 1,500 feet.

The aerial photography shall be obtained with a 6-inch focal length aerial camera having a current calibration certificate meeting USGS requirements for photogrammetric mapping.

The aerial photography shall be conducted between 10:00 a.m. and 2:00 p.m. local standard time as soon as weather permits. The film annotation shall include the date of exposure, the scale of the photography, job number (W65230.C2), flight number and exposure number. For single exposure show single number.

Deliverables

One set of contact prints shall be delivered to CH2M HILL

APPENDIX C - PHOTOGRAMMETRIC MAPPING

Scope of Services

Provide photogrammetric mapping of the area outlined on Figure 2.

Mapping shall show the northerly property boundary, all planimetric features (buildings, walks, roads, fences, ditches, trees, utility poles and other such features visible on the photography) as well as contours and spot elevations on roads, dikes, and ditch inverts.

Specifications

Map accuracy shall meet or exceed the following minimum standards:

For horizontal accuracy, 90 percent of all well defined points shall be within 1/40 inch of their true positions and 100 percent of all well defined points shall be within 1/20 inch of their true position.

For vertical accuracy, 90 percent of all contours shall be within one-half a contour interval and 100 percent of all contours shall be within one contour interval. Ninety percent of all spot elevations shall be accurate to within one-quarter of the contour interval and all shall be within one-half of the contour interval.

Basis of bearing shall be geodetic north or based on the bearing of the northerly property boundary as given in the description of the property. Vertical datum shall be "sea level datum of 1929."

Photo control points must be kept outside the fenced hazardous waste site outlined in Figure 2.

All survey control points, horizontal and vertical, shall be shown on the finished map along with a tabulation of coordinates and elevations for all survey control points. Description, origin, and elevations of bench marks used for mapping control shall be shown on the map. Mapping control shall be shown on the map.

A map sample showing symbols, lettering and line weights shall be submitted to CH2M HILL for review and comment prior to final drafting of the map.

The map shall show the basis of bearing, north arrow, date of photography, names of streets and highways, job number (W65230.C2), project name (Environmental Conservation and Chemical Corporation Site), bar scale and legend.

The final map shall be ink on mylar or scribed.

Deliverables

One set of contact prints showing all horizontal and vertical mapping control points.

One blue line print of the final map to be submitted for field check, review and comments prior to submittal of the final map.

The original aerial negatives.

One final drafted map on 4-mil mylar film.

The original map manuscript.

CLIDA 4	PURCHASE ORDER NO.
CH2M SERVICES (OR SUBCONSULTANT) ##HILL PURCHASE ORDER	PROJECT NO.
FUNCTIASE UNDER	BILL AND
	DELIVER TO:
•	CH2M HILL
DATE SERVICES: TO BEGIN	TO BE COMPLETED
NOTES:	•
. IF THE DOLLAR VALUE OF THIS PURCHASE ORDER EXCEED TO THIS PURCHASE ORDER, PURSUANT TO INSTRUCTIONS	DS \$10,000, ISSUER MUST ATTACH CH2M HILL E.E.O.C. FORM NO. 119 APPEARING ON THE REVERSE SIDE HEREOF.
2. PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOIC	
COORE OF WORK	
SCOPE OF WORK	
<u> </u>	
	
COMPENSATION:	
THE GENERAL CONDITIONS APPEARING ON THE REVERSE AS ANY DRAWINGS, SPECIFICATIONS, OR OTHER PAPERS A	SIDE HEREOF ARE A PART OF THIS PURCHASE ORDER, AS WEL
THE GENERAL CONDITIONS APPEARING ON THE REVERSE AS ANY DRAWINGS, SPECIFICATIONS, OR OTHER PAPERS AT TERMS AND CONDITIONS ACCEPTED BY VENDOR.	SIDE HEREOF ARE A PART OF THIS PURCHASE ORDER, AS WEL
AS ANY DRAWINGS, SPECIFICATIONS, OR OTHER PAPERS A	SIDE HEREOF ARE A PART OF THIS PURCHASE ORDER, AS WELATTACHED.

COPY TO: VENDOR

DATE

DATE

TITLE

SERVICES PURCHASE ORDER GENERAL CONDITIONS

- 1. The work included in this purchase order shall be performed by vendor at its (his) own expense, including the furnishing of all labor, materials, and equipment required, and shall be performed strictly in accordance with the terms and conditions of CH2M HILL'S general contract with the owner (if applicable). The work shall be subject to the inspection and approval of CH2M HILL.
- 2. As required by CH2M HILL, vendor shall, during performance of services covered by this purchase order, maintain worker's compensation coverage in accordance with the laws of the state where the work is performed, and shall furnish certificates of insurance showing that he has auto and general liability coverage of \$500,000/\$1,000,000 for death and injury, and \$500,000 property damage, and professional liability coverage as deemed necessary by the project manager for CH2M HILL. The liability insurance coverage must be with a company or companies satisfactory to CH2M HILL. Certificates of such insurance shall be furnished to CH2M HILL by vendor prior to commencement of the work.
- 3. Vendor shall comply with all federal, state, and local laws, regulations, and ordinances applicable to the work to be done under this purchase order.
- 4. Vendor shall protect, defend, and indemnify CH2M HILL, its officers, employees, and agents of and from any and all claims, damages, compensation, suits, actions and expenses, including reasonable attorneys' fees, relating to any and all losses or damages sustained by, or alleged to have been sustained by any person, including employees of the parties hereto, and occasioned or allegedly occasioned in whole or in part by the negligent acts or omissions of the vendor, or anyone directly or indirectly employed by the vendor, while in any way engaged in the performance of this purchase order.
- 5. Vendor shall not sublet or assign any of the work covered by this purchase order except with prior written approval of CH2M HILL.
- 6. Vendor may submit claims to CH2M HILL for progress payments not more than once each month by the 25th of each month; such payments will be made within ten (10) days of receipt by CH2M HILL of reimbursement by the owner for each claim, except that claims for progress payments in amounts less than \$500.00 will be paid when normally due without regard to CH2M HILL'S reimbursement by the owner.
- 7. If it becomes necessary for CH2M HILL to take legal action to enforce any term of this purchase order, vendor shall be liable to CH2M HILL for all costs incurred in such legal action, including reasonable attorneys' fees.

INSTRUCTION TO ISSUER:

CH2M HILL is required by federal law (Executive Order 11246) to pass equal employment opportunity provisions along to its subconsultants and vendors; therefore, if the dollar value of this purchase order exceeds \$10,000, issuer must attach CH2M HILL E.E.O.C. Form No. 119A to this purchase order. Vendor's signature of acceptance on the reverse side of this form will include acceptance of the E.E.O.C. Form No. 119A and its provisions, when attached to this purchase order.



CH2M HILL CONTRACTORS, SUBCONTRACTORS, VENDORS AND SUPPLIERS EQUAL OPPORTUNITY ADDENDUM

Vendor acknowledges that for all contracts and/or purchase orders issued or entered into with CH2M HILL, in favor of the Vendor, this supplement, when applicable conditions prevail, will automatically be a part of and an attachment to CH2M HILL Purchase Order Form Number 119; therefore, Vendor agrees to the following provisions:

EQUAL OPPORTUNITY CLAUSE

Vendor shall be bound by and agrees to the following provisions as contained in Section 202 of Executive Order 11246 to wit:

- 1. The Vendor will not discriminate against any employee or application for employment because of race, color, religion, sex, or national origin. The Vendor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following; employment, upgrading, demotion or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Vendor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- 2. The Vendor will, in all solicitations or advertisements for employees placed by or on behalf of the Vendor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- 3. The Vendor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the Vendor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The Vendor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 5. The Vendor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Secretary of Labor for purpose of investigation to ascertain compliance with such rules, regulations, and orders.
- 6. In the event of the Vendor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this Purchase Order/Contract may be cancelled, terminated or suspended in whole or in part and the Vendor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 7. The Vendor will include the provisions of paragraphs (1) through (7) in every Subcontract or Purchase Order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or Vendor. The Vendor will take such action with respect to any Subcontract or Purchase Order as the Secretary of Labor may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event the Vendor becomes involved in, or is threatened with, litigation with a Subcontractor or Vendor as a result of such direction by the Secretary of Labor, the Vendor may request the United States to enter into such litigation to protect the interests of the United States.

AFFIRMATIVE ACTION COMPLIANCE PLAN

The Vendor further agrees and certifies that if the value of any contract or purchase order is \$50,000 or more and the Vendor has 50 or more employees the Vendor will, if so required, develop and maintain a written Affirmative Action Compliance Program for each of its establishments as required by Title 41, Code of Federal Regulations, Section 60-2.

CERTIFICATION OF NONSEGREGATED FACILITIES

Vendor certifies that he does not and will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not and will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The phrase "segregated facilities" includes facilities which are in fact segregated on a basis of race, color, creed, or national origin because of explicit directive or by habit, local custom, or otherwise. Vendor agrees that he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Employment Opportunity Clause.

EMPLOYER INFORMATION REPORT (EEO-1, STANDARD FORM 100)

The Vendor further agrees and certifies that if the value of any contract or purchase is \$50,000 or more and the Vendor has 50 or more employees, the Vendor will file a complete and accurate report on Standard Form 100 (EEO-1) with the appropriate Federal agency within thirty (30) days of the date of contract award, runless such a report has been filed within the twelve (12) month period preceding the date of the contract award) and otherwise comply and file such other compliance reports as may be required under regulations adopted thereunder.

(cont. on reverse side)

EMPLOYMENT OF VETERANS

- 1. As provided in Executive Order 11701 (41 CFR 50-250) the Vendor agrees that all employment openings of the Vendor which exist at the time of execution of this contract and those which occur during the performance of this contract, including those not generated by the contract and including those occuring at an establishment of the Vendor other than the one wherein the contract is being performed but excluding those of independently operated corporate affiliates, shall, to the maximum extent feasible, be offered for listing at an appropriate local office of the Federal-State Employment Service system wherein the opening occurs and to provide such periodic reports to such local office regarding employment openings and hires as may be required: Provided, that this provision shall not apply to openings which the Vendor fills from within the Vendor's organization or are filled pursuant to a customary and traditional employer-union hiring arrangement and that the listing of employment openings shall involve only the normal obligations which attach to the placing of job orders.
- 2. The Vendor agrees further to place the above provision in any subcontract directly under this contract.
- 3. As provided in Section 2012 of the Vietnam Veterans Readjustment Act of 1974, with respect to all Contracts in the amount of \$10,000 or more, the Vendor shall take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era.

EMPLOYMENT OF HANDICAPPED

Vendor shall be bound by and agrees to the provisions of Section 503 of the Rehabilitation Act of 1973, and all regulations, rules, and orders promulated thereunder, to wit:

- 1. The Vendor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant is qualified. The Vendor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following; employment, upgrading, demotion or transfer, recruitment or recruitment advertising: layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- 2. The Vendor agrees, that if a handicapped individual files a complaint with the Vendor that he is not complying with the requirements of the Act, he will on investigate the complaint and take appropriate action consistent with the requirements of 20 CFR 741.29 and (2) maintain on file for three (3) years the record regarding the complaint and the actions taken.
- 3. The Vendor agrees that, if a handicapped individual files a complaint with the Department of Labor that he has not complied with the requirements of the Act (1) he will cooperate with the Department in its investigation of the complaint, and (2) he will provide all pertinent information regarding his employment practices with respect to the handicapped.
- 4. The Vendor agrees to comply with rules and regulations of the Secretary of Labor in 20 CFR Ch. VI, Part 741.
- 5. In the event of the Vendor's noncompliance with the requirements of this clause, the contract may be terminated or suspended in whole or in part.

MINORITY BUSINESS ENTERPRISE (Executive Order 11625)

- 1. It is the policy of the Government that minority business enterprises shall have the maximum practicable opportunity to participate in the performance of Government contracts.
- 2. The Vendor agrees to use his best efforts to carry out this policy in the award of his subcontracts to the fullest extent consistent with the efficient performance of the contract. As used in this contract, the term "Minority Business Enterprise" means a business, at least 50 percent of which is owned by minority group members or, in the case of publicly owned business, at least 51 percent of the stock of which is owned by minority group members. For the purposes of this definition, minority group members are Negroes, Spanish-speaking American persons, American-Orientals, American-Indians, American-Eskimos, and the American Aleuts. Vendors may rely on written representations by subcontractors regarding their status as minority business enterprises in lieu of an independent investigation.

AERIAL SURVEY SUBCONTRACTOR LIST

Markhurd Aerial Surveys 345 Pennsylvania Avenue South Minneapolis, MN 55426

Attn: Daryl Sather

Abrams Aerial Survey Corp. 124 N. Larch Street Lansing, MI 48901

Attn: Carl Schafer

Kucera 7000 Reynolds Road Mentor, Ohio 44060

Attn: John Analovich

Dickerson Aerial Surveys, Inc. 107 N. 10th Lafayette, IN 47901

Attn: Rowena Dickerson

Martinez Mapping & Engineering 240 E. Fillmore Ave. St. Paul, MN 55107

Attn: Jerry Ericksin